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Attorney's Docket No.: 06501-088001 / J1-101DP2PCT-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Tasuku Honjo et al.  
Serial No. : 09/966,880  
Filed : September 28, 2001  
Title : NOVEL CYTIDINE DEAMINASE

Art Unit : 1645  
Examiner :

Attention: Official Draftsman  
Commissioner for Patents  
Washington, D.C. 20231

TRANSMITTAL OF FORMAL DRAWINGS

Please substitute the enclosed seventeen (17) sheets of formal drawings for the corresponding drawings presently in the application.

Please apply any charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 06501-088001.

Respectfully submitted,

Date:

May 31, 2002

Jack Brennan  
Reg. No. 47,443

Fish & Richardson P.C.  
225 Franklin Street  
Boston, Massachusetts 02110-2804  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906

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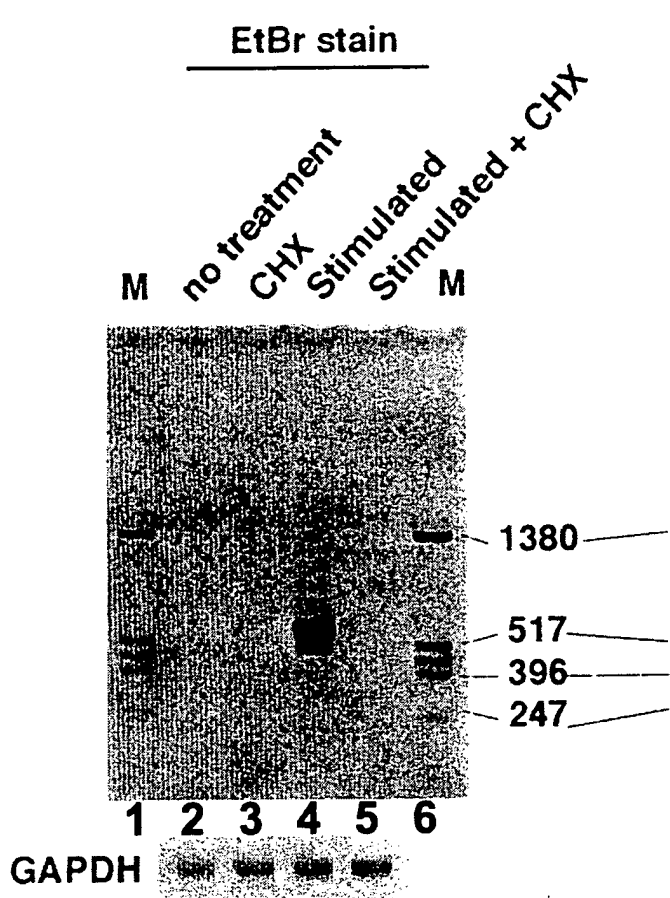


FIG. 1A

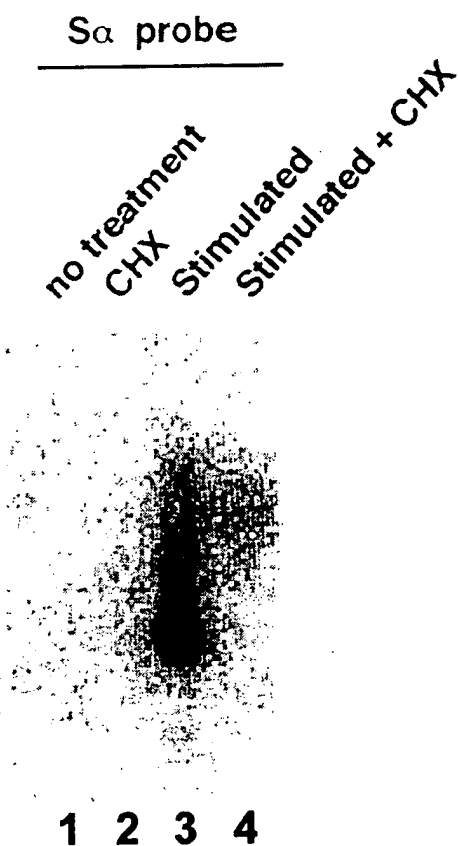


FIG. 1B

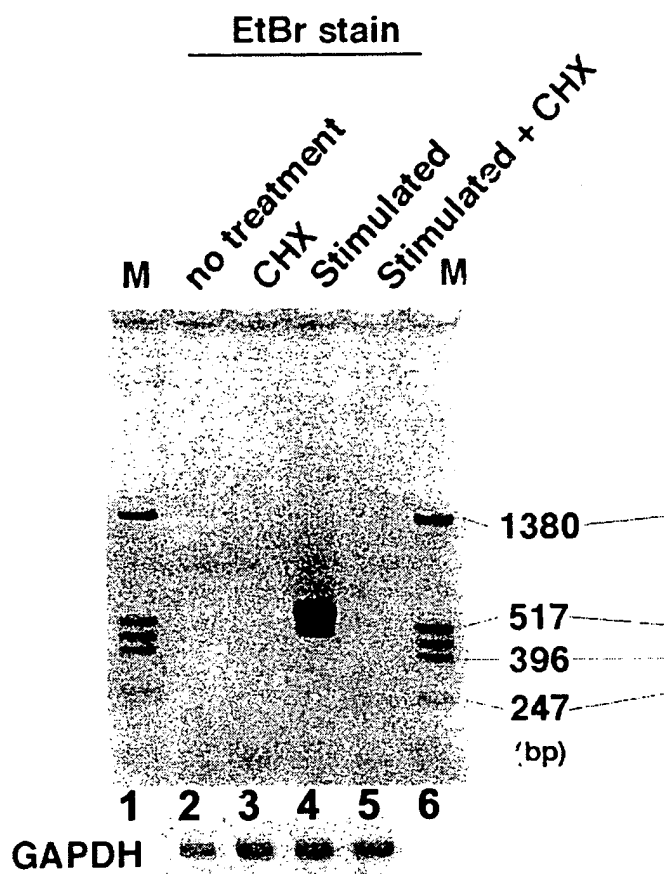


FIG. 2A

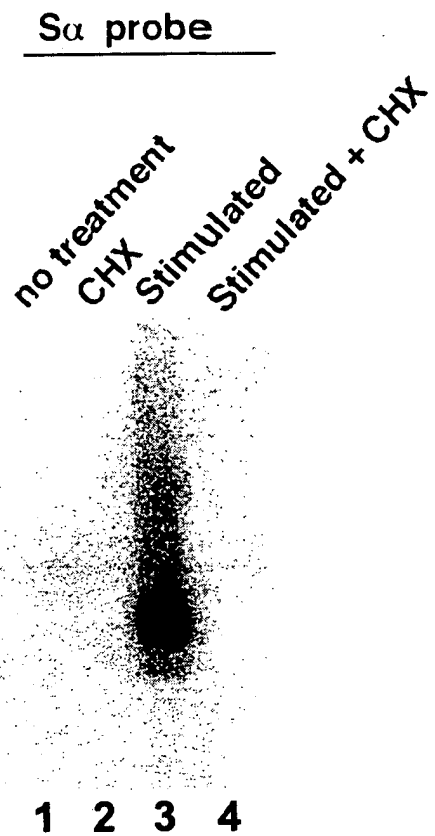


FIG. 2B

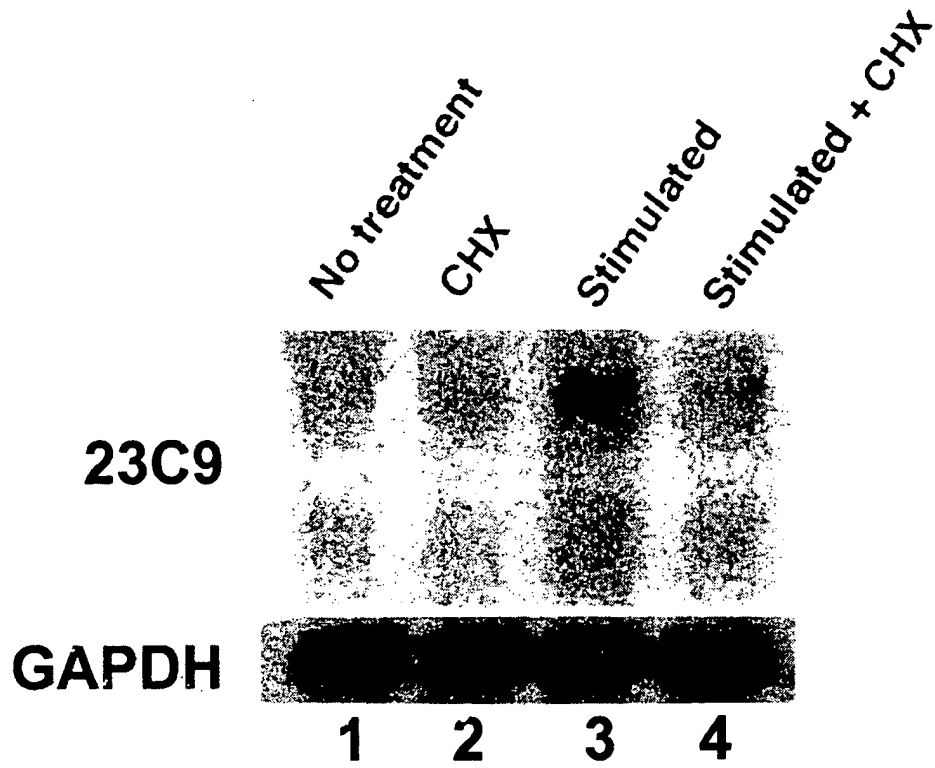


FIG. 3

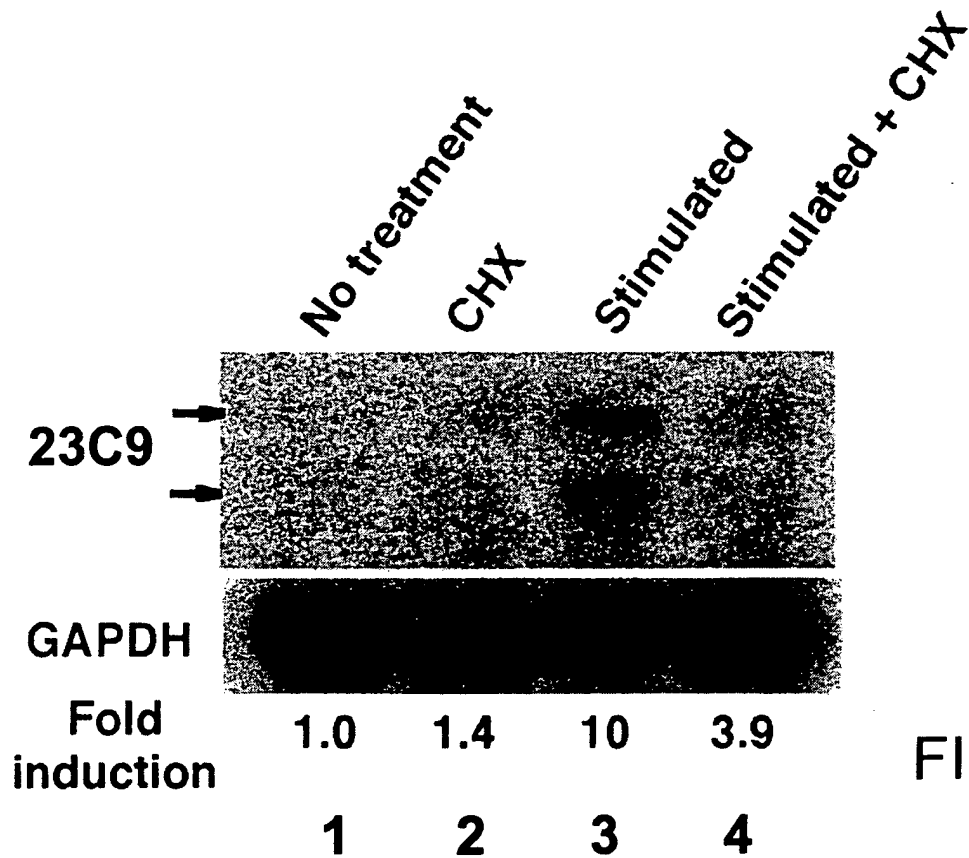


FIG. 4

mAID	1	M--D--SL-L-MK-QKKF-LYHFKNVRW-AKG-RHETYLCTYVVKRRDSATSCSLDFGMLR	50
mAPOBEC-1	1	MSSETGPVAVDPTLRRRIEPHEF-EVFFDPRELKTCCLLYEIN-W-GGRH-SV-WRIITS	55
mAID	51	NKSGCHVELLFL-RYISDWDLDLP-GRCYRVTFNFTSWSPCYDCARHVAEFLRWNPNLSLRI	108
mAPOBEC-1	56	QNTSNHIVEVNFLEKFTTTERYFRPNTRC-SITWFLSWSPCGECRAITEFLSRHPYVTLFI	114
mAID	109	FTARLYFCEDRKAEPEGLRRLHHRAGVQIGIMTFKDYFYCWNTFVENRRTFKAMEGLHEN	168
mAPOBEC-1	115	YIARLYHHTDQR-NRQGLRDLISSGVTIQIMTEQEQYCYCWNRNFVNYPPSNEAYWPRYPHL	173
mAID	169	SVRL-TRQLRRILPLYE-VDDLDDAFRLGF-----	198
mAPOBEC-1	174	WVKLYVLELYCIIIGLPPCLKILRRKQPQLTFFITILQICHYQRIPPHLLWATGLK	229

FIG. 5

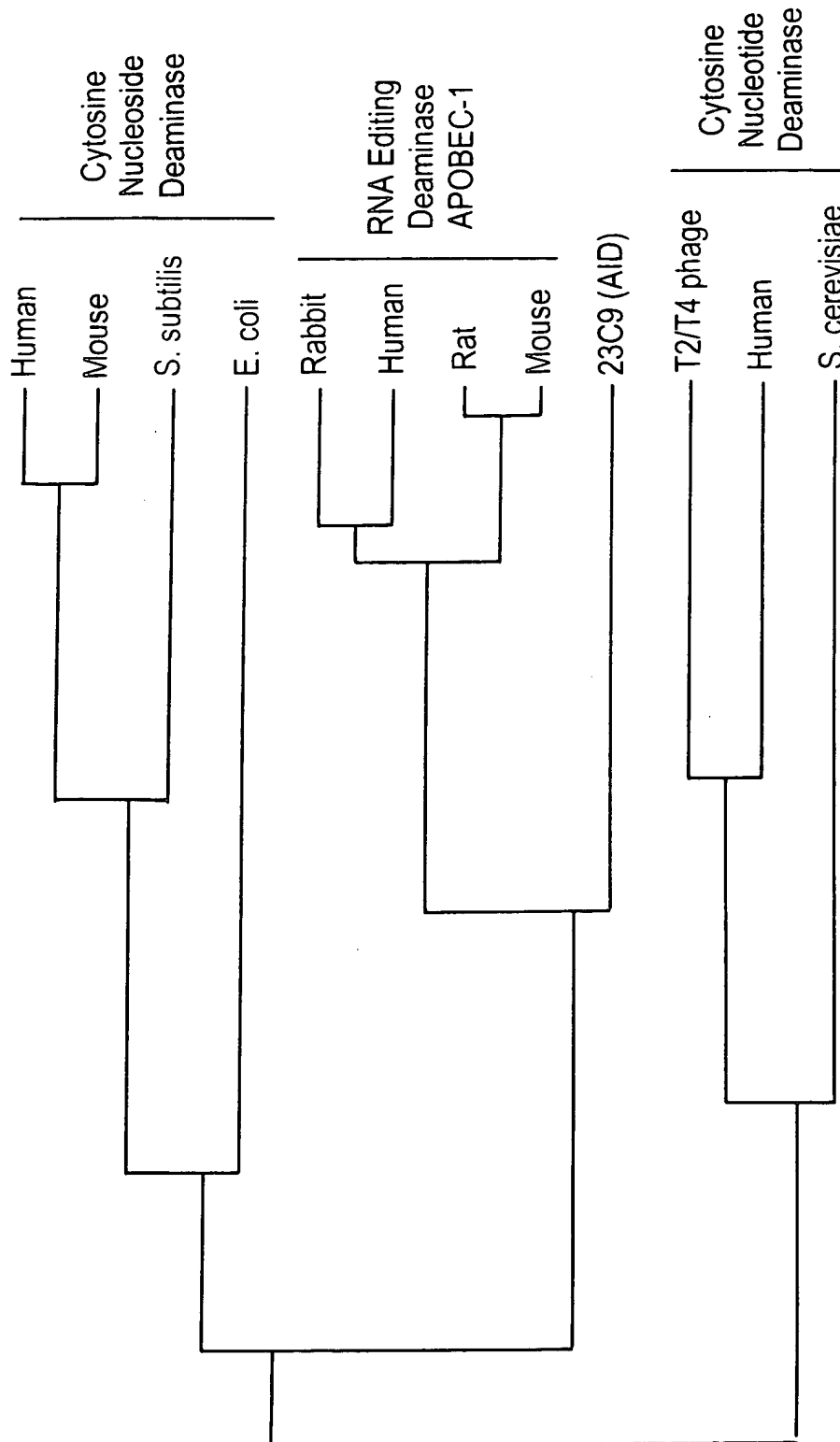


FIG. 6

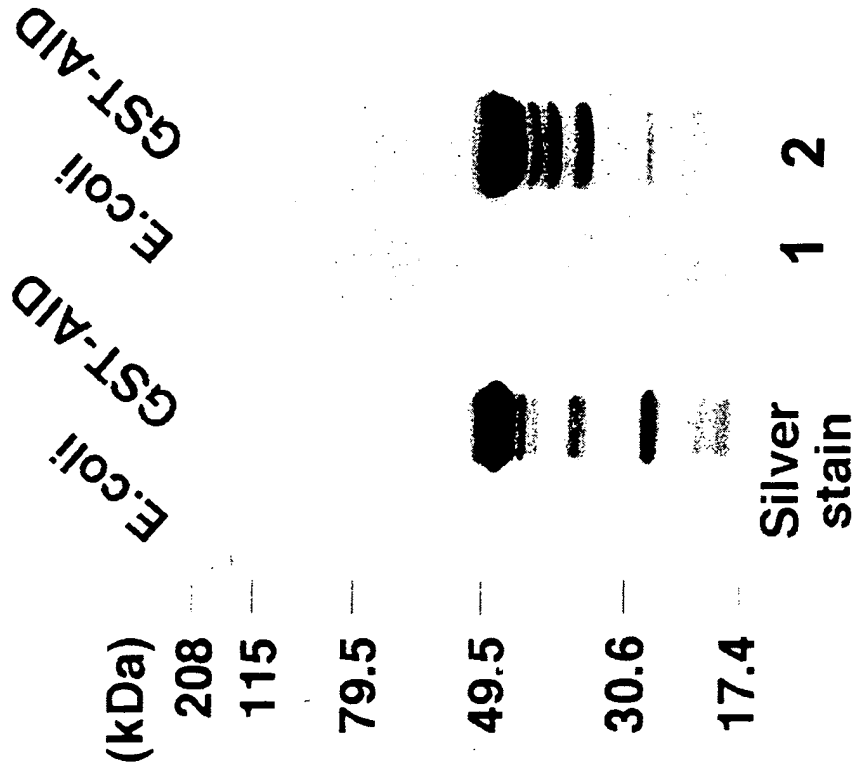
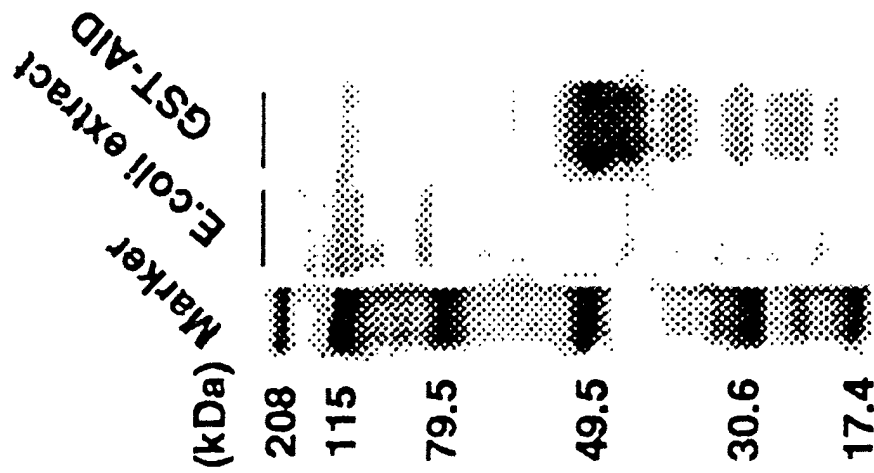


FIG. 8



1 2 3

FIG. 7

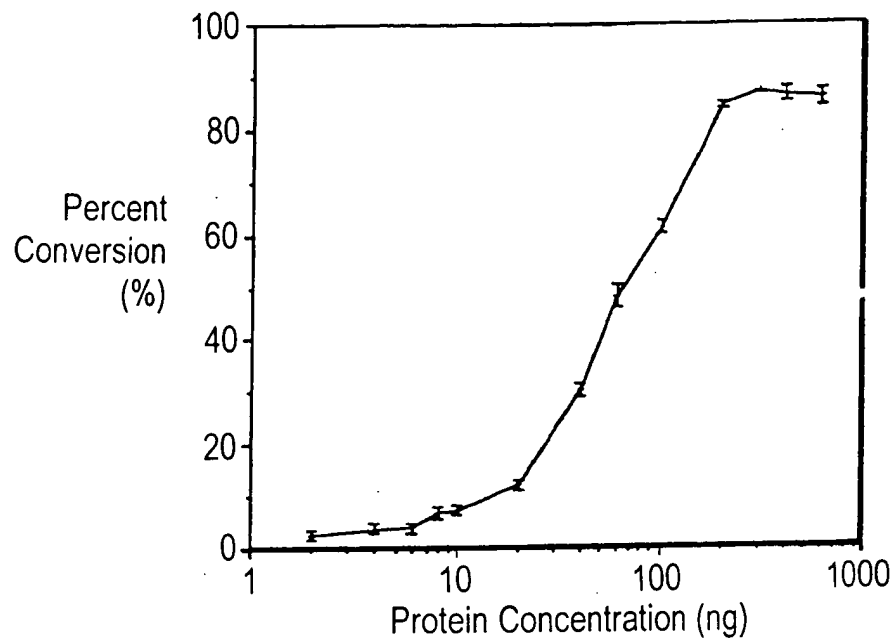


FIG. 9

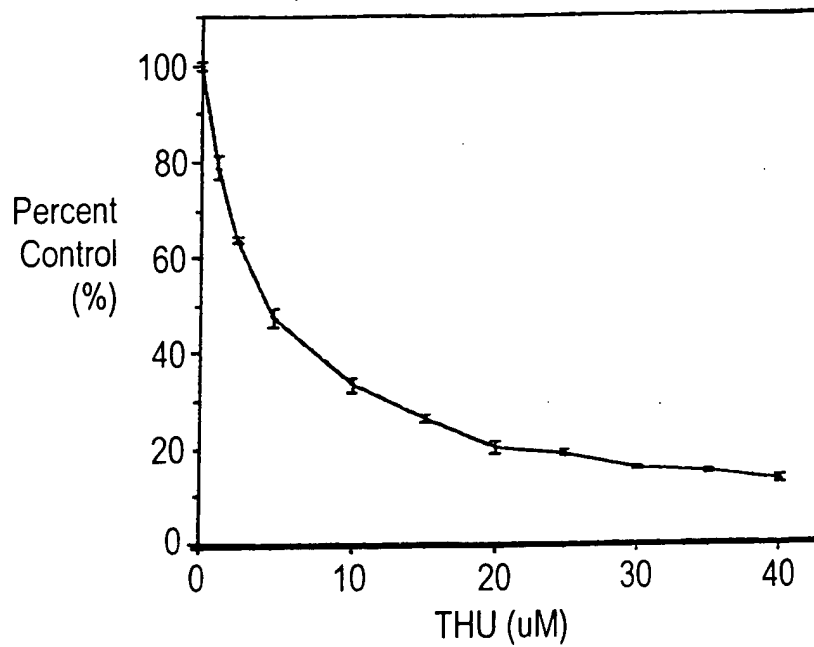


FIG. 10



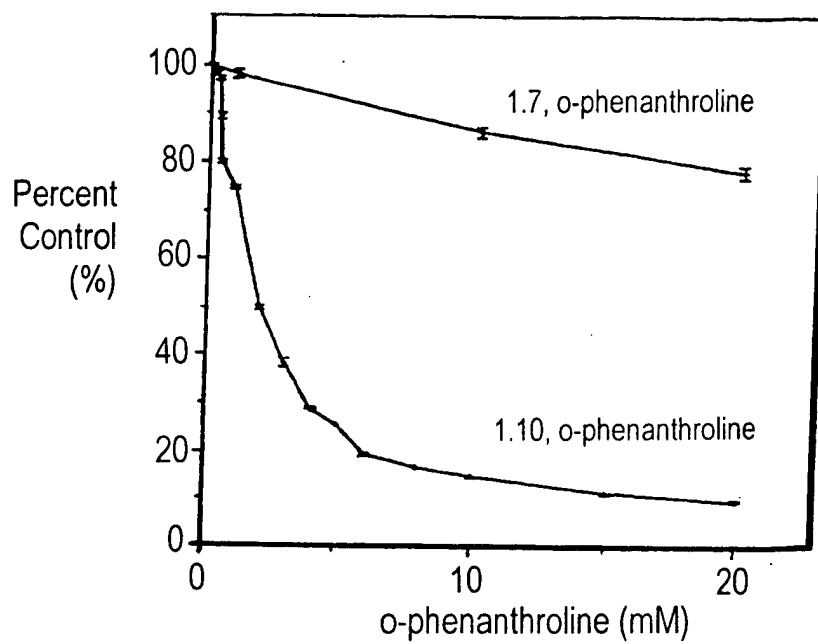


FIG. 11

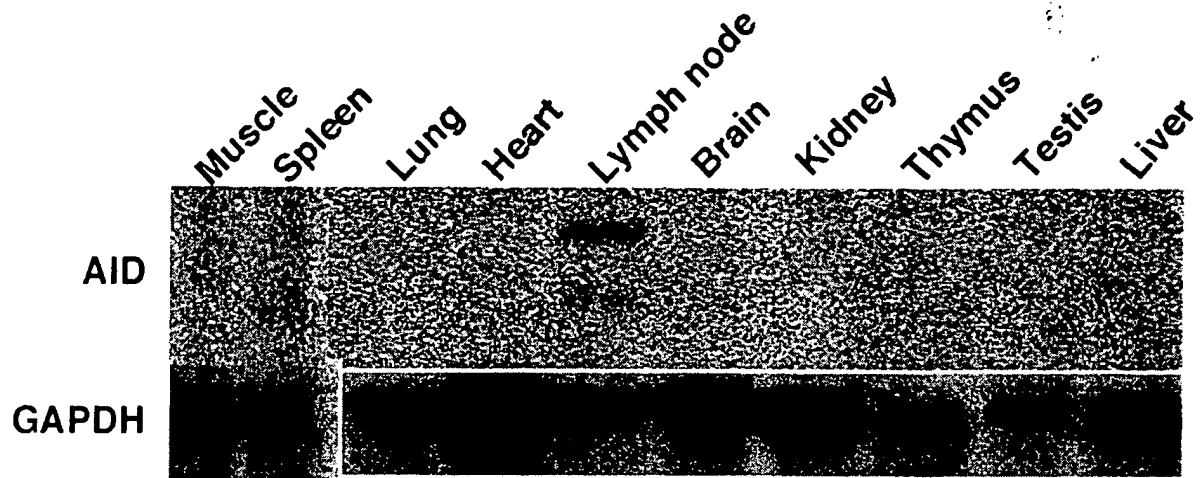


FIG. 12

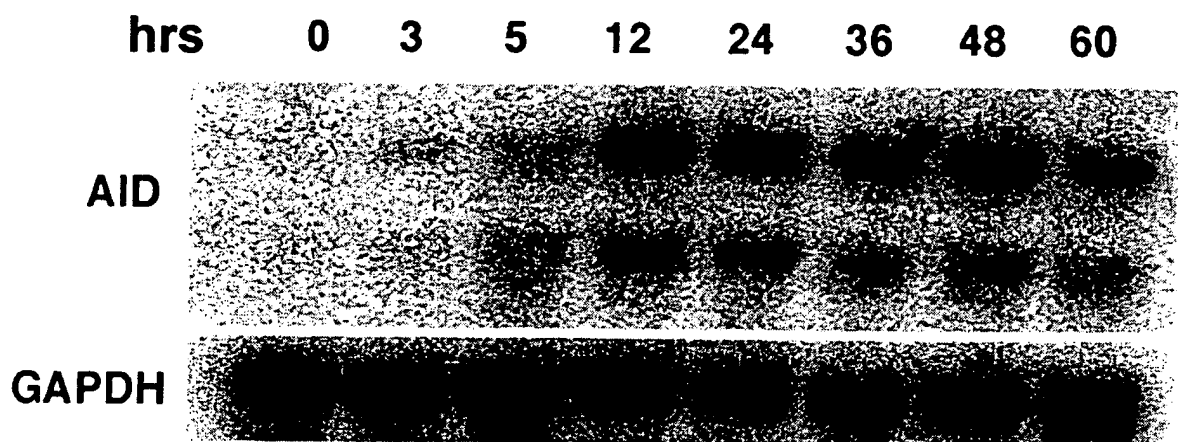
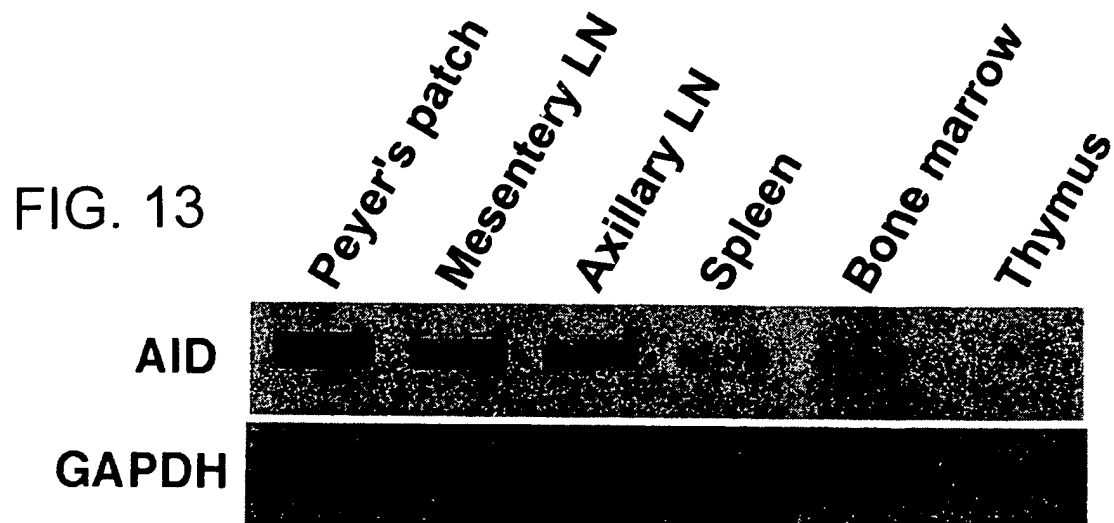


FIG. 14

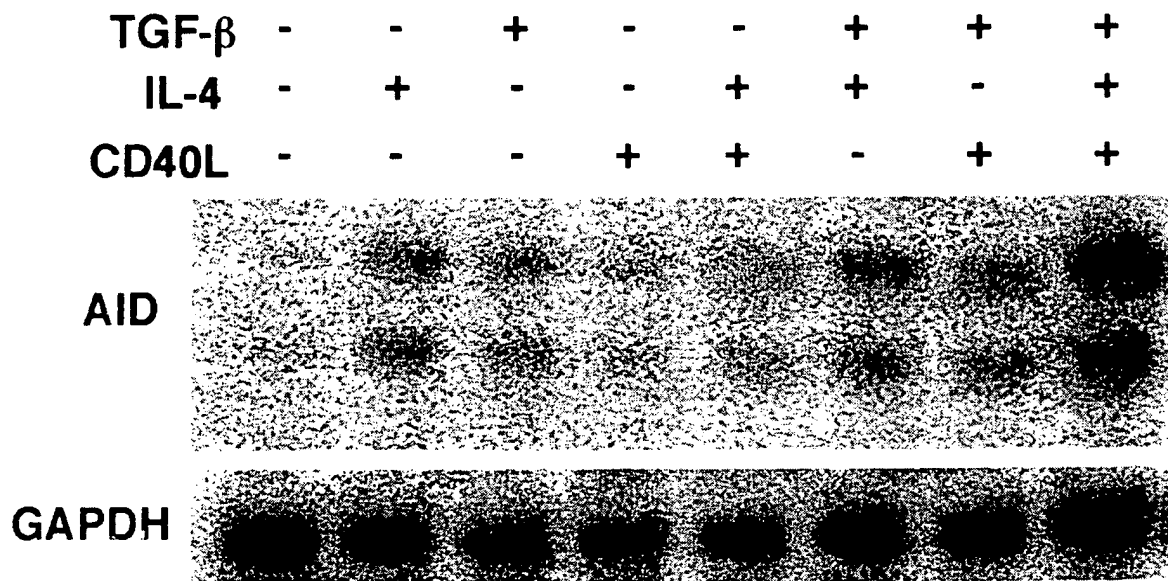


FIG. 15

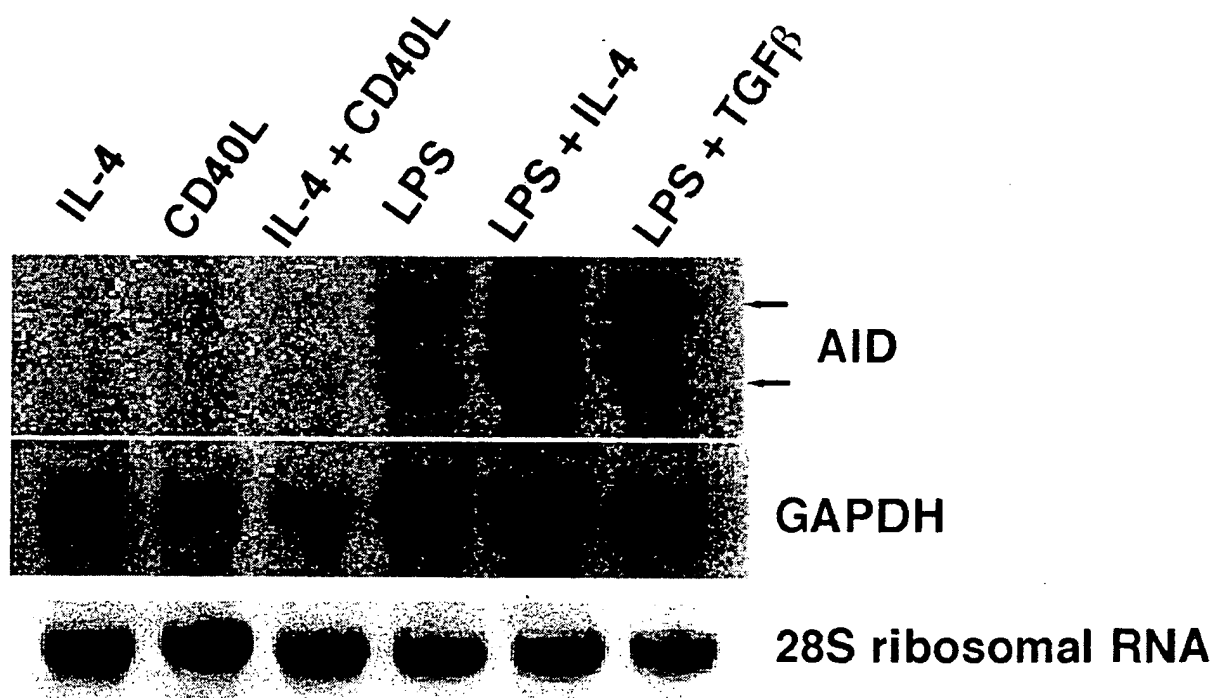


FIG. 16

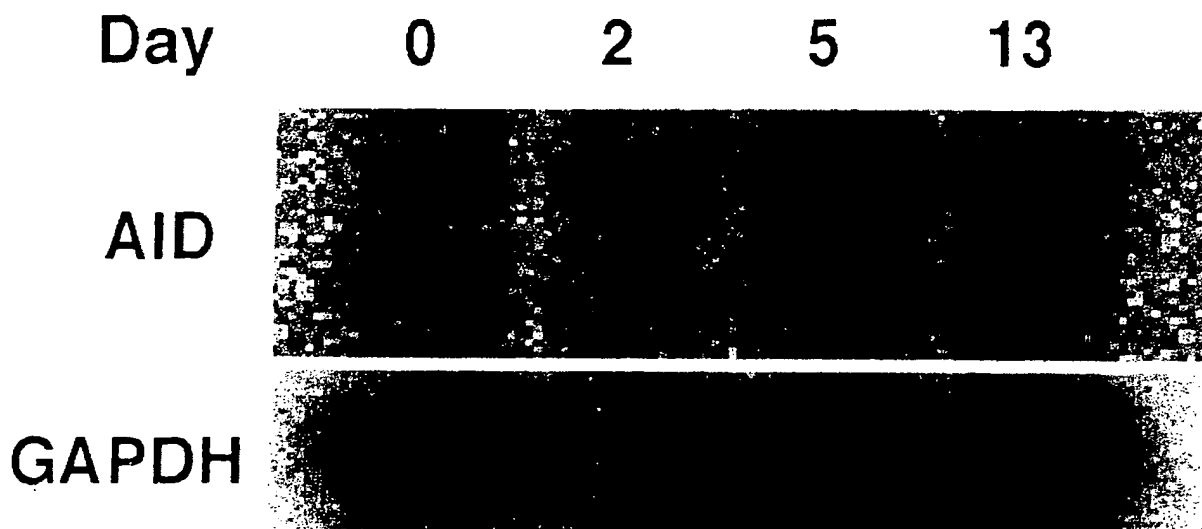


FIG. 17

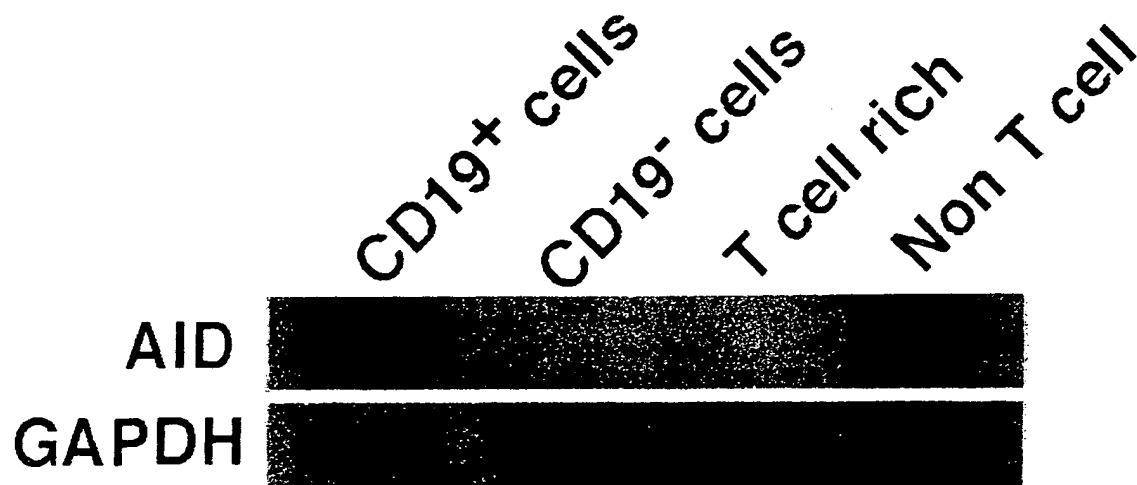


FIG. 18

Day 0



FIG. 19C

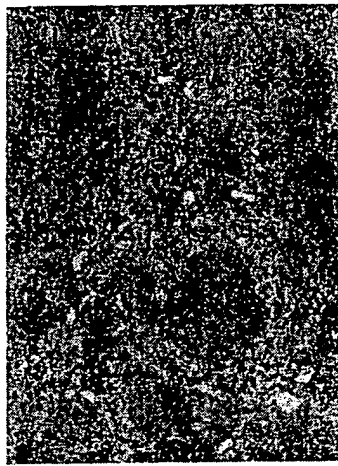


FIG. 19B

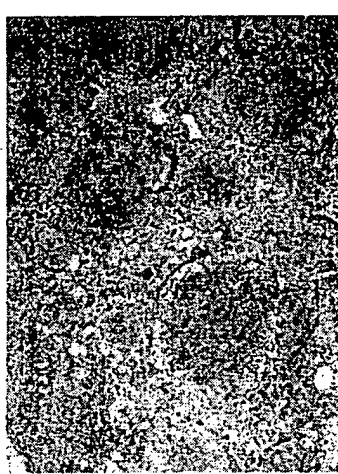
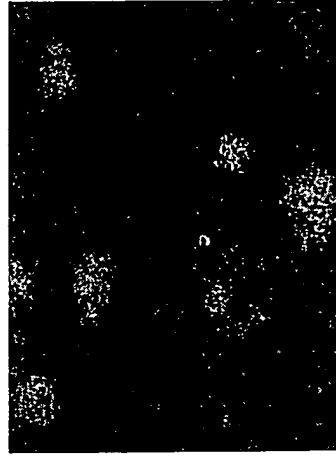


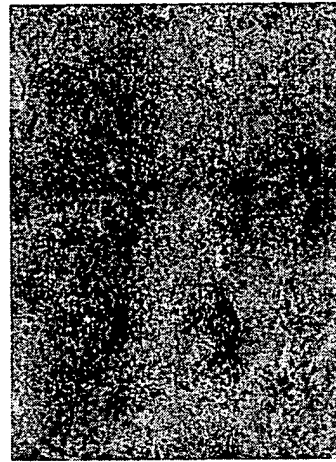
FIG. 19A

Day 5



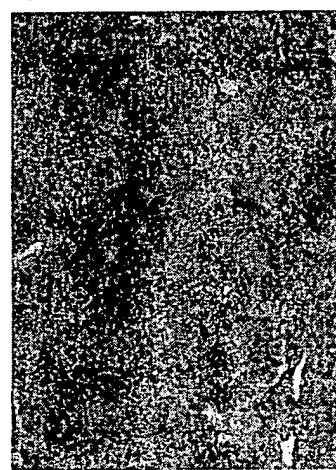
PNA receptor

FIG. 19F



AS probe

FIG. 19E



Sense probe

FIG. 19D

Spleen  
SRBC  
Day 0

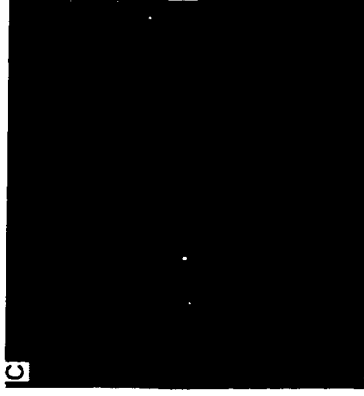


FIG. 20C

Spleen  
SRBC  
Day 5

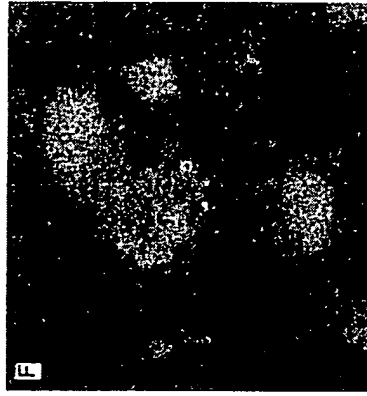


FIG. 20F

Peyer's Patch  
SRBC Day 0

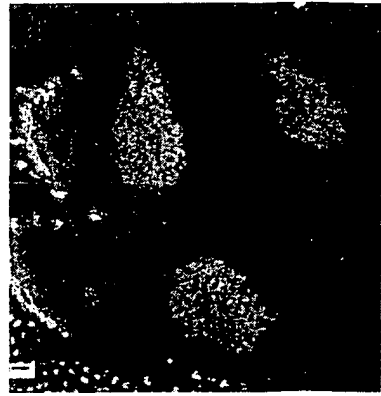


FIG. 20I

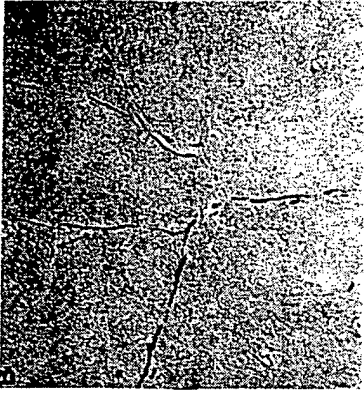


FIG. 20B

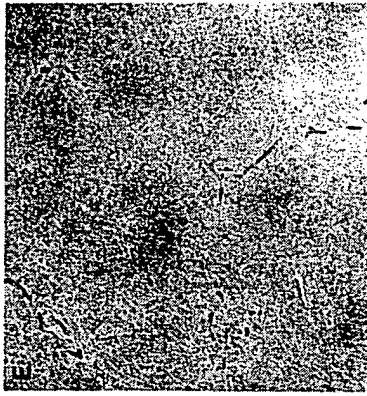


FIG. 20E

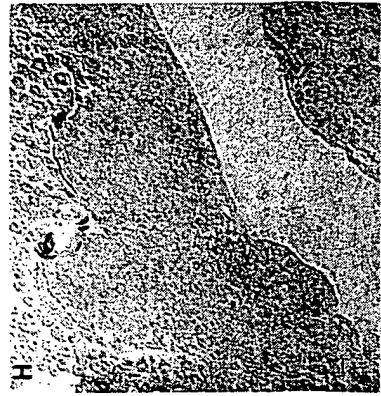


FIG. 20H

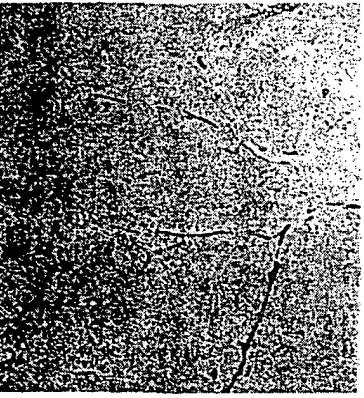


FIG. 20A

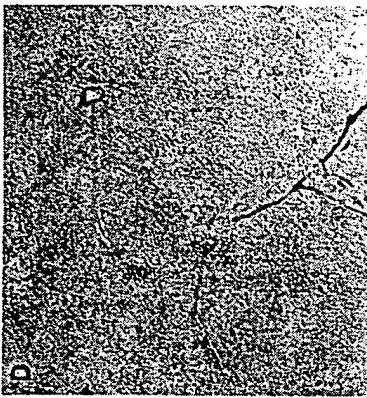


FIG. 20D

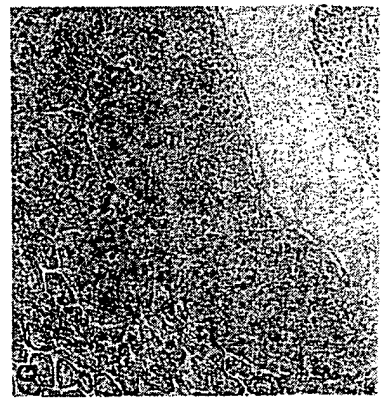


FIG. 20G

PNA-FITC

Anti-sense probe

Sense probe

(I)

(H)

(G)

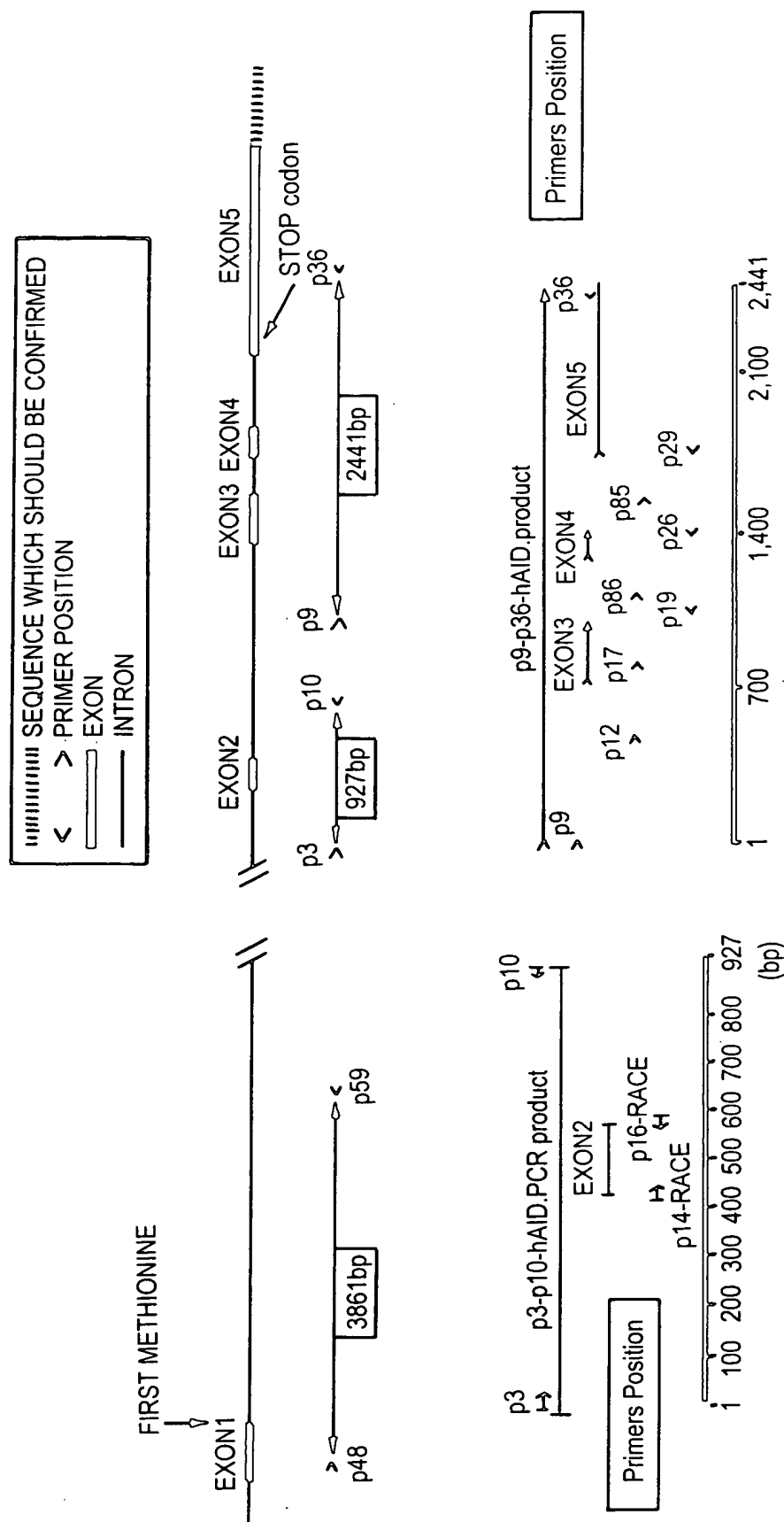


FIG. 21

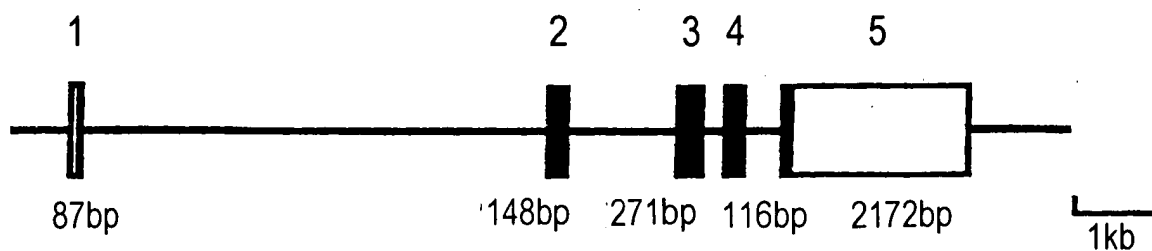
Human : 1 MDSLLMNRRKFLYQFKNVRWAKGRRETYLCYVVKRRDSATSFSLDFGYLRNKGCHVELL 60  
\*\*\*\*\* ++\*\*\*\*\*  
Mouse : 1 MDSLLMKQKKFLYBKNVRWAKGRHETLYCYVVKRRDSATSCSLDFGHLRNKSGCHVELL 60

Human : 61 FLRYISDWDLDPGRCYRVTWFTSWSPCYDCARHVADFLRGNPNLRLRIFTARLYFCEDRK 120  
\*\*\*\*\*+\*\*\*\*\*  
Mouse : 61 FLRYISDWDLDPGRCYRVTWFTSWSPCYDCARHVAEFLRWNPNLRLRIFTARLYFCEDRK 120

Human : 121 AEPEGLRRLHRAGVQIAIMTFKDYFCWNTFVENHERTFKAWEGLHENSVRLSRQLRRIL 180  
\*\*\*\*\*+\*\*\*\*\*  
Mouse : 121 AEPEGLRRLHRAGVQIGIMTFKDYFCWNTFVENRERTFKAWEGLHENSVRLTRQLRRIL 180

Human : 181 LPLYEVDDLRLDAFRTLGL 198  
\*\*\*\*\*  
Mouse : 181 LPLYEVDDLRLDAFRMLGF 198

FIG. 22



Exons	5' Splice Donor	3' Splice Acceptor	Exons
1	GACAGgt	agCCTCT	2
2	ATAAGgt	agAACGG	3
3	CAAAGgt	agATTAT	4
4	TTTTGgt	agCCCCT	5

FIG. 23



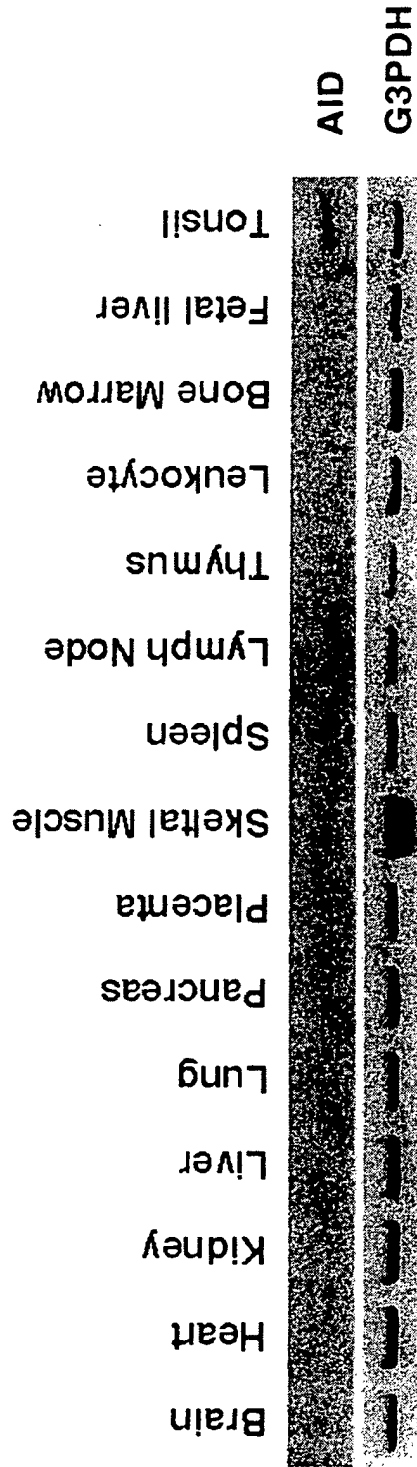


FIG. 24

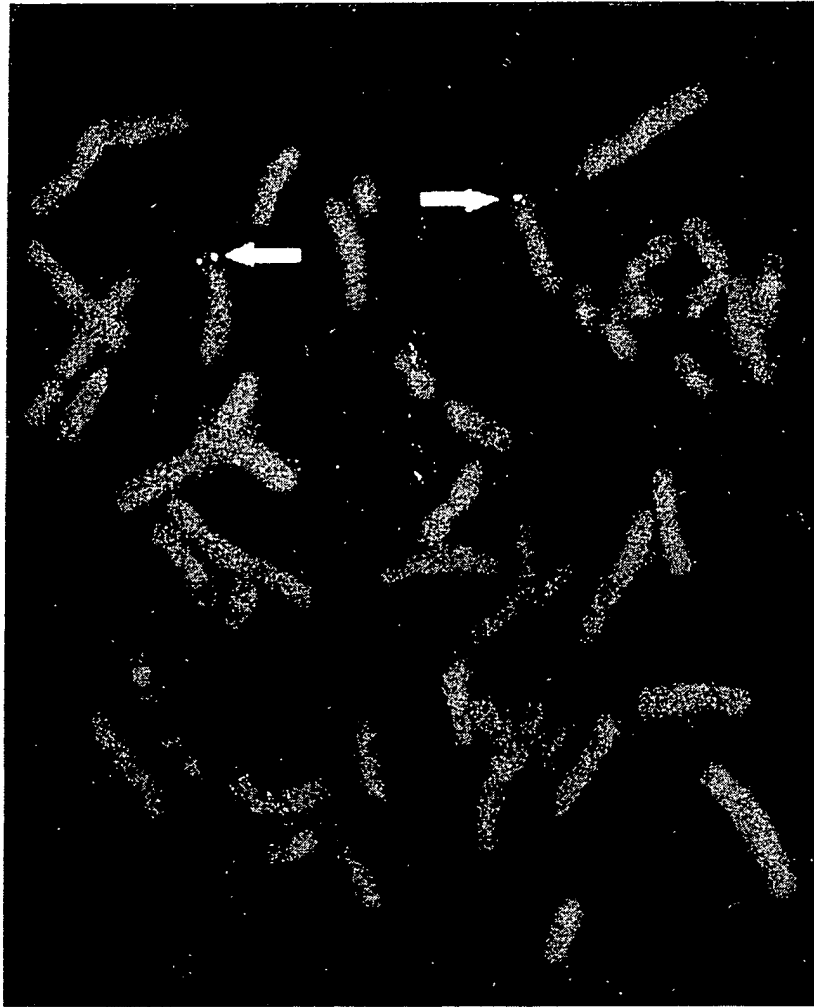


FIG. 25